

## WHAT IS CLAIMED IS:

- 1     1.     In a network environment having a plurality of users each having a network-enabled  
2     calendar, the improvement comprising:  
3             a computer-implemented hook-up assistant (HUA) capable of  
4                 determining an appropriate time when at least two people will be available to  
5             participate in an event or activity;  
6                 scheduling said event or activity at said appropriate time on respective  
7             calendars of said at least two people; and  
8                 initiating said event or activity substantially at said appropriate time.
- 1     2.     The improvement according to claim 1, wherein  
2             said HUA comprises preferences and constraints of one of said at least two people;  
3     and wherein  
4             said appropriate time is determined consistent with said preferences and constraints.
- 1     3.     The improvement according to claim 1, wherein  
2             said HUA comprises  
3                 privileges to access and alter said respective calendars of said at least two  
4             people, and  
5                 means for accessing and altering said respective calendars of said at least two  
6             people according to said privileges.
- 1     4.     The improvement according to claim 1, further comprising:  
2             means for activating said HUA in response to a request from one of said at least two  
3     people.

- 1     5.     The improvement according to claim 4, wherein  
2           said means for activating further comprises  
3                 means for interacting with said one of said at least two people; and  
4                 means for proposing said event or activity based on inputs obtained during  
5           said interaction.
- 1     6.     The improvement according to claim 4, wherein  
2           said means for activating further comprises  
3                 means for interacting with said one of said at least two people to solicit yes or  
4           no answers; and  
5                 means for proposing said event or activity based on said answers.
- 1     7.     The improvement according to claim 1, further comprising:  
2           means for activating said HUA in response to a request referring to a previous event  
3     or activity with desired changes thereto.
- 1     8.     The improvement according to claim 4 or 7, wherein  
2           said request is in a form of spoken or manually entered natural language, in a form of  
3     a computer language, or in a form of an electronic signal.
- 1     9.     The improvement according to claim 1, further comprising:  
2           automatically activating said HUA in response to an incomplete telephone call made  
3     by a first of said at least two people to a second of said at least two people.
- 1     10.    The improvement according to claim 9, wherein  
2           said incomplete telephone call is indicated by a busy signal, an answering machine, a  
3     voicemail service, a computerized agent, a human assistant, a receptionist, a secretary, an  
4     inanimate entity, or an animate entity other than said second of said at least two people.

- 1     11.     The improvement according to claim 1, wherein  
2             said HUA comprises means for exchanging data related to said respective calendars  
3     essentially regardless of physical and virtual boundaries that include distance, language,  
4     platforms, operating systems, and network protocols.
- 1     12.     The improvement according to claim 11, wherein  
2             said means for exchanging data is capable of encoding a cross-domain structured  
3     syntax language including hypertext markup language (HTML), eXtensible HTML  
4     (XHTML), eXtensible markup language (XML), XML document type definition (DTD), and  
5     XML schema.
- 1     13.     The improvement according to claim 1, wherein  
2             said HUA comprises means for assuring said at least two people be able to participate  
3     in said event or activity at said appropriate time.
- 1     14.     The improvement according to claim 13, wherein  
2             said means for assuring comprises  
3                 means for determining whether said at least two people will have, at said  
4             appropriate time, access to suitable communication means that will be available for  
5             use in said event or activity; and  
6                 means for reminding said at least two people about said event or activity.
- 1     15.     The improvement according to claim 14, wherein  
2             said suitable communication means include wired and wireless communication  
3     devices, resources, web-based services, cellular phones, telephones, video phones, Internet-  
4     enabled phones, Internet-enabled input devices, instant messaging, virtual meeting places,  
5     online chat rooms, online games, Multi-User Dungeons (MUDs), MUD Object Oriented sites  
6     (MOOs), personal digital assistant (PDA), and World Wide Web Consortium (W3C)  
7     compliant multimodal interaction means.

1 16. The improvement according to claim 1, wherein  
2 said event or activity is a phone conversation, a business meeting, a family gathering,  
3 or a social engagement.

1 17. The improvement according to claim 1, wherein  
2 said HUA comprises means for securing reservations necessary to realize said event  
3 or activity for said at least two people.

1 18. The improvement according to claim 1, wherein  
2 said event or activity requires admission tickets, tokens, or permits; and wherein  
3 said HUA comprises means for purchasing said admission tickets, tokens, or permits  
4 for said at least two people to attend said event or activity.

1 19. The improvement according to claim 1, wherein  
2 said event or activity requires invitations; and wherein  
3 said HUA comprises means for obtaining invitations for said at least two people to  
4 attend said event or activity.

1 20. The improvement according to claim 1, wherein  
2 said appropriate time or said event or activity is found infeasible or otherwise  
3 undesirable,  
4 said HUA comprises means for proposing at least one alternative.

1 21. The improvement according to claim 1, wherein  
2 said HUA is capable of proposing changes in prior commitments on said respective  
3 calendars when a new request can only be desirably satisfied by impinging on said prior  
4 commitments.

1 22. The improvement according to claim 21, wherein  
2 said HUA is capable of altering said prior commitments in accordance with proper  
3 privileges predetermined or obtained in real time.

- 1    23.    The improvement according to claim 21 or 22, wherein  
2            said HUA is enabled to determine independently how said prior commitments can be  
3 altered; and wherein  
4            said HUA automatically alters said prior commitments on said respective calendars to  
5 satisfy said new request and promptly notifies those affected by said alteration.
- 1    24.    The improvement according to claim 23, wherein  
2            said alteration is selected from the group consisting of rescheduling said prior  
3 commitments, replacing said prior commitments with alternatives, and a combination  
4 thereof.
- 1    25.    The improvement according to claim 1, further comprising:  
2            means for activating said HUA, or invoking one or more functions thereof, in  
3 response to a triggering mechanism selected from the group consisting of a tone, a button, a  
4 key, a sound, a spoken word, a sequence of tones, a sequence of buttons, a sequence of keys,  
5 a sequence of sounds, a sequence of spoken words, and a combination thereof.
- 1    26.    The improvement according to claim 25, wherein  
2            said HUA automatically contacts or automatically schedules to contact a person, an  
3 agent of said person, or a HUA of said person to schedule a hook-up event to bring its user  
4 and said person together.
- 1    27.    The improvement according to claim 26, wherein  
2            said contact is realized by phone, text message, voice message, or email.
- 1    28.    The improvement according to claim 26, wherein  
2            said schedules to contact is effected periodically until a certain criterion is satisfied.

- 1    29.    The improvement according to claim 1, further comprising:  
2            a computer product for implementing said HUA, the computer product comprising a  
3    computer readable medium carrying computer-executable instructions implementing a  
4    plurality of functions of said HUA.
- 1    30.    The improvement according to claim 29, wherein  
2            said computer product is embodied in a phone, a stand-alone network-enabled device,  
3    a client, a server, or a combination thereof.
- 1    31.    The improvement according to claim 29, wherein  
2            said computer product is implemented as part of an instant messaging system.
- 1    32.    In a distributed network environment having a plurality of users each of which may or  
2    may not be assisted by an agent, the improvement comprising:  
3            a computer-implemented hook-up assistant (HUA) capable of  
4            receiving and accepting a plurality of hook-up requests;  
5            scheduling a plurality of events to effect and fulfill each of said plurality of  
6    hook-up requests, wherein said scheduling include, for a desired event,  
7            determining an appropriate time for all parties involved to attend said desired  
8    event; and  
9            tentatively committing said all parties involved by indicating said desired  
10    event at said appropriate time on calendars of said all parties involved.
- 1    33.    The improvement according to claim 32, wherein  
2            each of said plurality of hook-up requests is specified in terms of a series of people or  
3    groups with whom interactions are separately desired.
- 1    34.    The improvement according to claim 32, wherein  
2            the sequence of said interactions correlates with the order of said series.

1 35. The improvement according to claim 32, wherein  
2 said HUA comprises means for enabling a requesting user to minimize resources,  
3 including time and expenses, associated with participating in all scheduled events on said  
4 user's calendar.

1 36. The improvement according to claim 32, wherein  
2 said HUA comprises  
3 means for maintaining a federated calendar;  
4 means for accessing and retrieving calendar data from a plurality of sources in  
5 said distributed network environment; and  
6 means for processing said calendar data to generate integrated views of said  
7 federated calendar.

1 37. The improvement according to claim 36, wherein  
2 said HUA further comprises  
3 means for storing privileges, constraints, and preferences, wherein  
4 said accessing and retrieving calendar data is effected in accordance with said  
5 privileges, constraints, and preferences.

1 38. The improvement according to claim 36, wherein  
2 said federated calendar contains  
3 information about devices, resources, services, and at least one of said  
4 plurality of users.

1 39. The improvement according to claim 32, wherein  
2 said HUA is capable of  
3 updating said calendars of said all parties involved, thereby committing said  
4 all parties involved to attend said desired event at said appropriate time.

1     40.     The improvement according to claim 32, wherein  
2             said HUA comprises means for exchanging calendar information across physical and  
3     virtual boundaries that include distance, language, platforms, operating systems, and network  
4     protocols.

1     41.     The improvement according to claim 40, wherein  
2             said HUA further comprises means for encoding said calendar information written in  
3     a cross-domain structured syntax language including hypertext markup language (HTML),  
4     eXtensible HTML (XHTML), eXtensible markup language (XML), XML document type  
5     definition (DTD), and XML schema.

1     42.     The improvement according to claim 32, wherein  
2             said HUA is capable of proposing at least one alternative when said appropriate time  
3     or said desired event is found infeasible, inapplicable, or otherwise undesirable.

1     43.     The improvement according to claim 32, wherein  
2             said HUA is capable of proposing changes in prior commitments on said calendars of  
3     said all parties involved when a new request can only be desirably satisfied by impinging on  
4     said prior commitments.

1     44.     The improvement according to claim 43, wherein  
2             said HUA is capable of altering said prior commitments in accordance with proper  
3     privileges predetermined or obtained in real time.

1     45.     The improvement according to claim 43 or 44, wherein  
2             said HUA is enabled to determine independently how said prior commitments can be  
3     altered; and wherein  
4             said HUA automatically alters said prior commitments on affected calendars to  
5     satisfy said new request and promptly notifies those affected by said alteration.



- 1    46.    The improvement according to claim 45, wherein  
2            said alteration is selected from the group consisting of rescheduling said prior  
3    commitments, replacing said prior commitments with alternatives, and a combination  
4    thereof.
- 1    47.    The improvement according to claim 32, further comprising:  
2            a computer product for implementing said HUA, the computer product comprising a  
3    computer-readable medium carrying computer-executable instructions implementing a  
4    plurality of functions of said HUA.
- 1    48.    The improvement according to claim 47, wherein  
2            said computer product is embodied in a stand-alone network-enabled device, a client,  
3    a server, or a combination thereof.
- 1    49.    The improvement according to claim 47, wherein  
2            said computer product is implemented as part of an instant messaging system.